

BEYOND BE, KNOW, DO: Leadership Implications for the Force XXI Leader

A Monograph
By
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Field Artillery



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ABSTRACT

BEYOND BE, KNOW, DO: LEADERSHIP IMPLICATIONS FOR THE FORCE XXI LEADER
by MAJ Darryl A. Williams, USA, 51 pages.

This monograph addresses the leadership component of battle command. It contends that leaders of the 21st century and beyond will have to possess additional competencies, skills, and abilities which current leadership doctrine does not adequately address. The technological advances of information systems along with increasing regional threats add to the complexity, uncertainty, and ambiguity that future leaders must cope with in future battle. After a review of existing leadership components, the paper ultimately offers future looking concepts from both military and academic circles to help address these increased leader requirements.

First, from the TRADOC 525-XXX pamphlet series, one learns that the leaders must possess a broader cultural awareness than they have in the past, they must have increased intuitive skills and have a good understanding of the second and third order effects of the media. Next, future leaders will need to possess competencies which have traditionally resided at levels beyond the tactical level of decisionmaking. Additionally, because theory and doctrine will only be good points of departure for the future leader, he therefore will rely heavily on tacit skills to solve complex problems. Twenty-first century leaders must also be reflective leaders who are able to improve and adapt to situations in a timely manner. The leader who, when faced with a surprise from the enemy, is able to reassemble existing mental structures faster than the enemy will be successful. Finally, future leaders must be systems thinkers because it allows the leader to separate battlefield complexity into manageable parts.

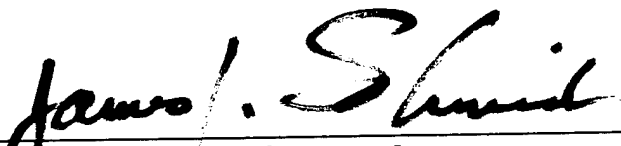
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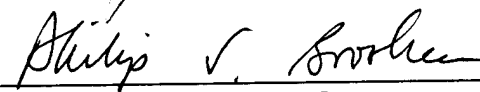
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I. Introduction

Battlefield leadership at all levels is an element of combat power. It is difficult to measure, but nonetheless is present and a decisive contributor to victory in battle.¹

General Frederick M. Franks

The 1993 edition of FM 100-5 marked the doctrinal introduction of the concept of battle command for the United States Army. TRADOC Pam 525-200-1, which addresses battle command in greater detail, defines it as "the art of battle decision making, leading, and motivating soldiers and their organizations into action to accomplish missions at least cost to soldiers."² As TRADOC commander after Desert Storm, General Frederick M. Franks' addition to the Army's doctrinal lexicon has, like most new things to established organizations that enjoy a rich tradition, met with some resistance, but by and large has been accepted into the Army's culture. The concept of battle command, and even other abstract concepts such as battlespace, is exactly the kind of cognitive energy that the Army needs to help explain, cope, and thrive in a complex environment that is constantly changing. The ability to "think outside the box" is a quality that the Army will rely on from its leaders more than it ever has in the past. B. H. Liddel Hart said, "It is in the minds of the commanders that the issue of battle is really decided."³ Field Marshal Count Helmuth von Moltke said, "First reckon, then risk."⁴ Thus, it appears that much of the art of battle command revolves around the leader's ability to exercise a fair amount of cognition.

Battle command does have two salient dimensions: decisionmaking and leadership.

According to FM100-5, decisionmaking in its simplest form, "is knowing if to decide, then when and what to decide."⁵ Leadership is:

taking **responsibility** for decisions; being **loyal** to subordinates; **inspiring** and **directing** assigned forces and resources toward a purposeful end; establishing a **teamwork climate** that engenders success; demonstrating **moral and physical courage** in the face of adversity; providing the **vision** that both focuses and anticipates the future course of events.⁶

From this definition, it is easy to see that leadership has many dynamic, working components which embody the whole concept. When one collects all these many aspects of leadership and combines them into one unifying whole, leadership becomes an integrating agent. FM 100-5 identifies the four elements of combat power as leadership, maneuver, firepower, and protection.⁷ Moreover, J. F. C. Fuller said, "that there are three essential elements of fighting-how to guard, how to hit, and how to move."⁸ Leadership is the integrating element, the one that synchronizes the other three.⁹ Effective leadership is the lubricant that coats the other major elements of combat power ensuring that battlefield friction is kept to a minimum. It allows you to accomplish more with less. What then does leadership specifically provide for an organization and its soldiers?

At the basic building block level, FM 22-100 lists the things an individual must **be**, **know** and **do** to be an effective leader. The "do" component is ultimately the most important aspect of the three-part concept. Leadership is about getting others to act in order to accomplish a goal. The manual also states that leadership must provide purpose, direction, and motivation. For example, a leader providing purpose explains the reasons why a particular mission is being conducted. A leader providing direction plans, maintains standards, and sets goals. Finally, a

leader providing motivation takes care of soldiers, serves as the ethical standard bearer, and rewards performance that exceeds standards.¹⁰ These leadership concepts from the above mentioned doctrinal manuals have stood, and will continue to stand, as clear pillars of strength in which to build one's leadership foundation upon. However, the recent dramatic changes reflected in the United States Army political and operational environment and the current technological revolution, beg the question concerning other implications for leading in the future. More specifically, are there clear implications at the tactical level of decisionmaking for the 21st century leader?

The future leaders of our Armed Forces face challenges that are full of complexity, uncertainty and ambiguity. Twenty-first century leaders will have to respond to worldwide threats that range the whole continuum of conflict. Unlike the Cold War era, United States forces may have little knowledge of our next opponent. Our opponents might fight in coordination with other belligerents, forcing us to reconsider some underlying assumptions concerning possible belligerents. Moreover, nation-states will no longer have a monopoly on warmaking, because many different kinds of factions and terrorist bands will have powerful weapons and means of destruction.¹¹ It is likely that the United States will fight predominately within the bounds of a coalition. These leaders will have to first mobilize, then project forces from United States based stations in a minimum amount of time. Upon arrival at their destination, forces must then be prepared to deter, and if necessary fight, to obtain national objectives while protecting forces. All of these moving parts become subject to friction and thereby increase the level of difficulty for leaders trying to accomplish a mission.

This quick snapshot of the future battlefield suggests that future leaders must possess

refined knowledge, skills, and abilities. Future leaders "must have such intuitive skills as vision, innovation, adaptability and creativity and the ability to simplify complexities and clarify ambiguities- all while under stress."¹² Established doctrinal manuals such as FM 25-100, FM 22-100, and FM 22-103 are good starting points for identifying and developing these future characteristics of leadership. Additionally, the TRADOC 525- XXX series of pamphlets provide great -forward looking insights for soldiers who are thinking about how leaders will lead tomorrow. Recent works such as draft 2.1 on Battle Command entitled "Leadership and Decision Making for War and Operations Other than War", and the Battle Command Techniques and Procedures from the Battle Command Battle Lab are helping identify critical aspects of the leader craft. However, besides these efforts, there are other sources to which the United States Army can look to for guidance and insight while developing their force XXI leader requirements.

From the academic circles, educational theory explains how reflective leaders can learn a process that will allow them to operate in conditions of uncertainty. Systems theory enables the leader to "see" with a broader, richer view rather than a narrow, limited one. Besides these insights, there are other useful concepts which can help enrich the traditional principles of leadership. Finally, from past and present individual examples of leadership there are opportunities to observe second hand what qualities future leaders must possess. The future 21st leader learns that he or she must be truly be a consummate soldier- statesman, who understands the linkage and relationship between politics and fighting. Thus, while some soldiers are content to rely on be, know, do, others are actively wrestling with what capabilities XXI century leaders must possess. This paper will show the importance of proceeding into the

next century with an approach that is sufficiently "broad" and robust in conceptual rigor; and that ultimately identifies the leader characteristics that 21st leaders need to meet the challenges of a battlefield that is uncertain, complex, and ambiguous.

II. Impact of Technology and Environment

Managing complexity involves a strong ability to deal with ambiguity, a talent for people and their potential the ability to maintain a balance between reliance on systematic planning skills and gut feeling, and most important-having a sense of vision.¹³

Today, we live in a world that is experiencing rapid changes. Complexity and ambiguity face our decisionmakers. As our nation's leaders struggle to maintain consistency in foreign and domestic policies, the only real constant appears to be that of change. Since the conclusion of the Cold War, our nation's leaders have continued "to integrate the elements of national power as they apply to the various regions of the world."¹⁴ United States policymakers would like to see continued democratic growth, human rights, independent judiciary, economic cooperation and available markets, and unrestricted trade with their fellow nations.¹⁵ Thus, current United States leadership anticipates a continual embrace rather than any kind of isolation or retreat on the world stage. The military, as a major agent in shaping our foreign policy, is exhibiting signs of this rapid flux. The scale and pace of recent change have made traditional means of defining future military operations inadequate.¹⁶ The United States Army current National Military Strategy consists of peacetime engagement, deterrence and conflict prevention, and fighting and

winning our Nation's wars by the complementary tasks of overseas presence and the projection of forces.¹⁷ The integration of these separate functions is necessary in order to respond to the many different types of potential missions ranging from traditional combat operations to OOTW (Operations other than War). Thus, the force, the doctrine, and the leaders that the United States develops must be robust enough to deal with the diversity that future environments will offer.

TRADOC Pam 525-5 posits that "there can be no single, prescribed, authoritative Army doctrine," which will address and adequately anticipate all the possible situations that leaders will find themselves making decisions.¹⁸ Additionally, this TRADOC manual portrays the potential operating environments as three circles characterized as OOTW, General War, and MRC (Major Regional Contingency)/ LRC (Lesser Regional Contingency). Moreover, within these three major groups there are a multitude of missions that the Army must be prepared to handle. The authors of TRADOC Pam 525-5 contend that General War includes things such as mobilization and major campaigns; MRC/LRC includes missions such as shows of force and strikes; and OOTW missions include everything from Peace Enforcement to Environmental Operations. To address these broad range of missions, "our Army adopted a doctrine of full-dimensional operations, stressing principles to be learned and understood, then relying on the art of battle command to apply those principles in scenarios as they occur-be they War or OOTW."¹⁹ The environment is not the only source of rapid change that future leaders will have to confront.

Current and future advancements in information technology will have a dramatic impact on how US forces will wage war. Future looking professionals like General Sullivan,

characterized these changes as a revolution that will have a dramatic effect on the Army and land warfare through five dominant trends: lethality and dispersion, volume and precision of fire, integrative technology, mass and effects, and, invisibility and detectability.²⁰ Twenty-first century technology causes some people to consider what many seasoned battle captains have deemed impossible. In the not to distant future, technology could process information so quickly that the decisionmaker will be able to fast-forward through the "cycle of action-reaction-counteraction on the battlefield,"²¹ and defeat the enemy in ways not possible in wars. Thus, victory in the 21st century battle will include not only the armed forces and the enemy's ability to wage war, but also the dominance of his information system.²² Through destruction of an enemy's ability to command and control itself and wage information warfare, Dr. James J. Schneider, Professor for the School of Advanced Military Studies (SAMS), posits that "a new kind of defeat mechanism wholly analogous to, but distinct form, attrition and maneuver,"²³ is possible. Perhaps first performed in the Civil War by Confederate forces, Dr. Schneider defines this new pattern as cybershock, which is the systemic paralysis of an army through the loss of its ability to direct and control itself effectively.²⁴

However, General Sullivan recognizes that these new concepts and patterns revolving around the technological explosion are subject to the same constraints and sources of friction that limited armies in past years. He says that "the limiting factor in the quest for making maximum use of integrative technology will not be the hardware, it will be human and organizational."²⁵ Thus, the proverbial "long pole in the tent" for the technological revolution will boil down to the interaction of leaders and soldiers. To maximize the benefits of technology, leaders must possess a good understanding of what they "need from technology,"

and then they must figure out how to make new capabilities meet their mission requirements. While technology offers another major component of change in addition to a dynamic operational environment, there are certainly other sources of change which also directly and indirectly affect how US forces will wage war. The media will continue to track the dynamic social and political issues as they play on the nation's stage. Often, they will erupt into a crisis that will consequently force second and third order effects on our institution. Recent examples of this phenomena include the issues of homosexuality and women in combat. While change is certainly a constant for immediate and future battles, some would contend that there are some immutable changes.

For General Sullivan, the continuities in the nature of warfare that remain relatively unchanged are first, "the root causes of war;" secondly, "that war demands both science and art from the leaders who wage it," and finally, "that wars resemble the past with respect to the essence of fighting power."²⁶ The most significant thread of the three, according to Sullivan, is that war is a function of scientific rigor and artistic license. In support of the scientific method, he says, "the future will find predictive modeling, integrative technology, precision guidance systems, and other high technology increasingly useful- necessary, but not sufficient."²⁷ However, this is only one part of the equation. The other requirement for effective leadership is equally important and he further says, "the artistic side of war will remain: creativity, intuition, leadership, motivation, decision making under conditions of limited information."²⁸ Thus, adequately addressing the concept of leadership demands that one understand that it is an expression of both science and art.

III. Traditional Components of Leadership

Having discussed what the environment will look like in the 21st century, it is now time to address what the implications are for the leader in this complex context. FM 22-100 requires that leaders satisfy these four requirements: lead in peace to be prepared for war, develop individual leaders, develop leadership teams, and decentralize.²⁹ This paper will concentrate on how better to develop individual leaders. Ultimately, there are only three major areas in which to have an effect on leader development. The first way involves institutional schools which "provide the formal education and training that all soldiers receive on a progressive and sequential basis."³⁰ This paper will later discuss the Army's institutional efforts to address leadership. The second way to impact on leadership development, is through the operational experience that a leader gains through assignments. The idea here being that the leader is able to build upon the formal training gained from schooling.³¹ This paper will not focus upon this because assignments vary from soldier to soldier and there is no "best assignment" with respect to leader development. While some might contend that a certain assignment is better, opportunities to display, provide and develop leadership occur everywhere.

In developing 21st century leaders one must consider the increasing importance of self-development. Quite simply, self-development recognizes that the formal education system has limits and the responsibility for much of leader development must reside with the individual. Preparation in times of peace is nothing new for the soldier, however, in these fast moving times the soldier must continuously labor to keep up with the world's unfolding events. Underlying assumptions, concepts and ideas will constantly evolve and change for the 21st century soldier.

What was a statement of fact a few months ago, may cause a serious breach in international relations. Thus, what are the characteristics or elements that are going to help this future warrior? Again, FM 22-100 offers a good starting point for examination of this requirement. This manual identifies a collection of leadership factors, principles, competencies, and styles that effective leaders demonstrate repeatedly over time.

The leadership factors are the building blocks for any close examination of the leadership dynamic. When one boils down leadership to its lowest common denominator one finds the four leader factors consisting of the led, the leader, the situation, and communications. The first factor is the group of subordinates that constitute the **led**. FM 22-100 points out that all "soldiers should not be led in the same way."³² Besides making common sense, this is well supported in behavioral psychology. Situational leadership theory contends that "the level of subordinate maturity determines the optimal level of leader behavior."³³ In simpler terms, a leader treats his subordinates according to their individual strengths and weaknesses.

With respect to the **leader**, FM 22-100 says that leaders "must have an honest understanding of who (they) are, what (they) know, and what they can do."³⁴ At first glance, this appears as a very simplistic approach to a process that is very dynamic. However, this author contends that if more leaders took this simple approach before every encounter with subordinates, the nature of their relationship would be richer and more effective. The behavioral sciences also offers insights about leader behavior, from the perspective of the subordinate. The Ohio State University leadership studies indicated that subordinates perceived their supervisor's behavior primarily in terms of two dimensions or behavior content categories. The first category dealt with the degree that a leader shows concern for subordinates, and the

second category dealt with the degree that a leader defines or structures his role and the role of subordinates. Examples of the first category include, how much time did the leader devote to listening to problems or "going to bat" for a subordinate, while examples of the second include criticizing poor work or asking subordinates to follow standard behaviors.³⁵ A leader can do a self-assessment with regards to these two dimensions and make corrections as his or her personal style warrants. Moreover, the principles of leadership, which is discussed later, offers another opportunity for one to do an assessment and develop a plan to improve.

There are two components to the **communications** factor. The first, as described by FM 22-100, is the actual exchange of information and ideas from one person to another. The manual further states, that it involves saying the correct thing at the appropriate moment and in the right way.³⁶ The second aspect is the actual way that one conducts communication whether it be in writing, orally, or a physical action. Soldiers of the next century will extend the "way" in which they communicate with the universal application of digitization. The bottom line is that communication involves transferring the concepts, ideas, and orders from the leader to the subordinates. This critical link between leader and led must be operational for an organization to accomplish a task.

Lastly, the **situation** is the contextual background that the leadership process takes place in and includes such things as the available resources and the factors of METT-T. Much like the considerations of situational leadership, the leader must consider the maturity and competence level of his subordinates to figure the appropriate leader style to use. At times, the leader may want to be more directive, and other times more delegative. Moreover, the conditions that the actual task is being completed in may affect how the leader is communicating. Combat

conditions, or extreme weather conditions, may stress the leader-led relationship and cause the leader to use a style that is not his or her usual operating style.

Throughout history, all captains whether great or small have had to lead in the context of these four variables. Napoleon's triumphs during the first part of the 19th century fundamentally revolved around how effective he was in communicating his intent to his soldiers in the context of Continental Europe. Although the time periods are different, the same basic elements existed for General Grant in the Civil War, or General Schwarzkopf in Desert Storm. Political, social, environmental, and economic forces all help form how these four factors eventually array themselves. The French Revolution allowed Napoleon to depend on a motivated soldier who was glowing with emotional fervor. Other situations might not afford the leader such good fortune, and thus his leadership style would have to be different for his circumstance. Thus, there is also an interdependent aspect to these four factors. So, just as these basic factors to the leadership model have evolved in the past, they will continue to evolve in the 21st century with even greater implications.

FM 22-100 states that the eleven principles of leadership are excellent guidelines and provide the cornerstone for leader action.³⁷ The principles are (1) Know yourself and seek self-improvement; (2) Be technically and tactically proficient; (3) Seek responsibility and take responsibility for your actions; (4) Make sound and timely decisions; (5) Set the example; (6) Know our soldiers and look out for their well-being; (7) Keep your subordinates informed; (8) Develop a sense of responsibility in your subordinate; (9) Ensure the task is understood; (10) Build the team; (11) Employ your unit in accordance with its capabilities. These are enduring principles, and while there are certainly other principles that are as equally important, such as

listening to your soldiers, and being true to yourself, 21st century leadership will cause no major revision of this list. Depending on one's individual level of expertise, leaders can use this "principle menu" to pick and choose the areas they need to improve upon, and make the appropriate corrections. If the individual leader cannot do it by himself, there certainly is a supervisor that can help in the developmental process. These principles of leadership are things that all leaders should try to strive for, however, adhering to these principles is like following the golden rule. One is not always actively conscious of these maxims, nor does one set out to always follow all of these principles. On the contrary, it is while going through the process of obtaining certain skills and competencies that leaders eventually comply with the general principles offered in FM 22-100.

FM 22-100 offers nine competencies that leaders must possess in order to be effective. These broad, general, categories provide a framework for leadership development and assessment.³⁸ Like the principles of leadership, these competencies are diverse enough that changes in the battlefield dynamics will not significantly inhibit their application. The authors who derived these concepts understood this phenomena and made them robust.

Communications is the exchange of information and ideas from one person to another; **supervision** entails controlling, evaluating, coordinating and planning the efforts of subordinates so that the task is accomplished; **teaching and counseling** refers to improving performance by overcoming problems, increasing knowledge, or gaining new perspectives and skills; **soldier team development** involves creating bonds so that units function as a team; **technical and tactical proficiency** involve knowing your job; **decisionmaking** refers to skills you need to make choices and solve problems; **planning** is intended to support a course of action so that an

organization can meet an objective; and **use of available systems** involves being familiar with the techniques, methods, and tools you need to be successful; and finally, **professional ethics** involves loyalty to the nation, the army, and one's unit.³⁹

The final part of the leadership process involves putting the factors, principles, and competencies all together and developing an individual leadership style. FM 22-100 contends that there are three basic styles of military leadership-directing, participating, and delegating.⁴⁰ A leader uses a directive style by telling subordinates "what he wants done, how he wants it done, where he wants it done, and when he wants it done."⁴¹ This style of leadership does not leave a lot of room for subordinates to display much initiative in accomplishing the task. A leader uses a participating style when he "involves subordinates in determining what to do and how to do it."⁴² This style of leadership actively seeks input from subordinates, but the leader is still the decisionmaker. Finally, the delegative decisionmaking style "delegates problem-solving and decision-making authority to a subordinate or to a group of subordinates."⁴³ This style of leadership assumes that you have very mature subordinates who are capable of making decisions in the best interest of the organization or group. In choosing a particular style, the leader must make an assessment given the conditions present. The key is to do an evaluation based on the four factors of leadership that were already previously mentioned. With respect to efficiency, the delegative style is the most efficient. If the leader can quickly do a mission analysis, divide the salient parts, and give them to his subordinates to help solve, this will allow him more time to focus elsewhere.

This part of the paper covered the "present" essential elements of the Army's approach to leadership. The task at hand is to fast forward all of these components into the next century and

beyond and consider the implications for leadership. In the 21st century, the four basic factors of leadership will still exist. Leaders will have to communicate to some group of subordinates in order to accomplish some task in varying conditions. Moreover, the principles of leadership will continue to provide a solid basis for self-assessment and a means to determine if leaders are thorough in their interactions with subordinates. With respect to what is currently published in the doctrinal publications, the biggest changes for the 21st century will occur in the competencies and attributes that future leaders need to possess. Current doctrine provides a good start, but there needs to be a clearer articulation of the present broad concepts with respect to how they address the dynamic changes that future leaders will face. There are other considerations that the 21st century leader needs to consider. Additionally, the future battlefield will have a bias toward a delegative decisionmaking style because of the amount of information and pace of the battle. Regardless of how much more knowledge the leader gains of the battlefield, he will never be able to totally orchestrate the actions of his subordinates, nor will he always have the time to wait for all subordinates to voice their opinion, and then make a decision. Given the relatively limited nature of current leadership doctrine, where then does one go to find those attributes, capabilities, or abilities in preparation for leadership on the future battlefield?

IV. Future Looking Trends

TRADOC Pam 525-5 which addresses Force XXI Operations, posits some visionary implications for leadership in the 21st century. It says that leaders

will be **fundamentally competent** and have the necessary **intuitive** sense of operational units and soldiers. Force XXI will have a **higher leader-to-led** ratio. Leaders will have a keen **awareness** of the world and know the role of military force in the world. Future leaders will have a **broader** understanding of war and the art of command. For example, in their professional development, they will be exposed to ideas on military art and science that **go beyond traditional models** and the views of primarily Western theorists.⁴⁴

This is a good attempt at what future leaders should be thinking about with respect to leader development. The above statement says that leaders must first be fundamentally competent, with respect to basic competencies, but there are additional considerations. Brigadier General David Ohle, Deputy Commandant, Commandant General Staff College says that one of the major themes that came out of the NTC rotation 9407 (digital rotation) was "that soldiers must meet the minimum level of skills, before one even begins to consider more complex level of skills."⁴⁵ This commentary suggests that the current competencies written in FM 22-100 are just the starting point for the 21st century leader. With respect to quantity, there will be a higher leader-to-led ratio because technology will replace many soldier functions on the future battlefield.

Technological advances bring both a quantitative and a qualitative component to the 21st century. Qualitatively, the tactical leader will have better tools in which to do battle

tracking, and thus possess more power at lower levels of command. 525-5 addresses this dynamic when it posits that "future leaders must understand the changing nature of the legitimacy of command authority."⁴⁶ However, one of the biggest capacities that tactical leaders in the 21st century will have to improve upon is in the area of awareness. Now that we have more of a power projection force, soldiers will find themselves stationed in Conus for longer period of times. One of the ancillary benefits of having lots of soldiers stationed overseas was that they learned how to relate with people of different cultures and nationalities. With continual interaction comes a sensitivity and empathy that will be important skills for the 21st leader.

Forces projected from the heart of Kansas into the heart of Somalia, will have to deal with a whole host of problems. Granted, this is not something that is novel to the United States Army and deploying to austere environments like Somalia will always be problematic. However, in the past when more soldiers were overseas they could practice, or transfer, more learned "coping skills" gained from interacting with other cultures. Finally, the exposure to other types of models will be important because Americans will find themselves fighting opponents that do not share the same world view as the United States. American soldiers have had some exposure to this in our past, and not they have not faired very well. Vietnam is the most striking example. Clearly, Asian ideology and models pose challenges for Western thinkers. The whole idea of protracted struggle is not something that is part of the western mentality of going to war. Ambiguity and complexity abound when the United States fight belligerents who do not share common ideals and cultures. Thus, our future belligerents may not be playing football, some will be playing soccer, and will probably bring their own ball.⁴⁷

A second major point to take from 525-5, is the importance the pamphlet sees in the power of intuition. More than ever, junior level leaders will need to have a fairly developed sense of intuitive skills. The pamphlet states that the importance of skills such as "vision, innovation, adaptability, and creativity and the ability to simplify complexities and clarify ambiguities-all while operating under stress."⁴⁸ Clausewitz's concept of coup d'oeil, which he defines as "his ability to see things simply, to identify the whole business of war completely with himself,"⁴⁹ encompasses many of the intuitive skills offered by 525-5. These skills are important to develop for two reasons. The first reason, is so that leaders can adapt to the complexity that this paper referred to earlier. The second reason, is more subtle but is important because it deals with being able to exploit the advantages that new technologies offer military forces. Leaders in the 21st century will be a part of "organizations that are flatter, internetted, and where quality soldiers with expanded and timely information are able to reach their full potential."⁵⁰ Therefore, once senior leaders are comfortable with empowering junior leaders with more authority because of their increased situational awareness, the subordinate leader must then possess the prerequisite skills to take full advantage of the opportunity.

Thirdly, 525-5 points to a trend that will cause some future thinkers to consider placing leaders of greater experience and rank at lower levels in the command structure.⁵¹ This is because of the increasing importance of decisions being made at the lower levels. In both environments of war and operations other than war, tactical level decisions can have instantaneous effects at the strategic level. Traditional and realistic considerations suggest that US forces will not, for example, place lieutenant colonels in charge of infantry platoons. However, recent experiences such as Somalia or Haiti suggest that whoever finds themselves at

the tip of the spear will have to realize that there is a world audience monitoring every action through the eyes of the media. Our experience in Vietnam, and our recent experience in Saudi Arabia, helped define the ends of the spectrum in respect to how the military will interact with the media in the future. Vietnam showed the military the pitfalls of letting the media have total access to the American soldier. Contrarily, Desert Storm demonstrated almost total control over the media's access to the warfighting. The reality for the 21st century leader is somewhere between these two extremes. The future leader must anticipate addressing the media, but should not have to deal with issues that compromise military operations. The men and women who find themselves in front of the camera and in the newspaper will not always be senior leaders of military forces. Thus, it is paramount that all leaders understand how their individual actions relate to the general situation as a whole.

525-5 allows the reader to look into the crystal ball and make some "best guesses" on how our Army will fight future battles and the associated implications tied to it. From the August 1994 edition of this pamphlet, one can gain some good insights considering the status of our changing world environment. According to this pamphlet, leaders must possess a broader cultural awareness than they have in the past, they must have intuitive skills, and finally have a good understanding of the second and third order effects that their actions will have through the instant access of the media. In addition to 525-5, another TRADOC publication, 525-200-1 offers additional insights in regards to the prerequisite skills and abilities needed for 21st century leaders.

In reading 525-200-1, one gets the sense that leaders must possess an increased capacity for advanced thinking skills. First, while describing the future battlefield, the pamphlet offers

some of the key aspects of this environment. Agility is defined as "the ability of friendly forces to act faster than the enemy," and "is a prerequisite for seizing and holding the initiative."⁵² More specifically, a commander's, or a leader's ability to be mentally agile is the cornerstone of a unit's ultimate ability to wage war. Secondly, the leader must possess a capacity to understand broad concepts such as battlespace, which 525-200-1 defines as "the entire battlefield to apply combat power to affect the enemy."⁵³ The ability to understand concepts such as these, entail much more than the expression "technically and tactically proficient," that army professionals toss around when commenting on a soldier's knowledge. Finally, leaders of the 21st century must understand that these flatter, more informed organizations will operate at a faster tempo and consequently, there will be the potential for more friction. Clausewitz says that "countless minor incidents . . . combine to lower the general level of performance, so that one always falls short of the intended goal."⁵⁴ Because of the interconnectivity of information type systems, minor incidents can potentially have multiplicative rather than additive effects. Small errors can ripple through the system at lightning speed causing what Dr. Schneider refers to as cybershock. Broad mental reasoning abilities will enable leaders to make order of chaos and resist total breakdown.

The ability to think broadly and filter out the important from the not so important has particular application for the leader in operations other than war scenarios. This ability is especially useful when leaders are trying to communicate and enforce a certain respect for rules of engagement (ROE) in their soldiers. Soldiers will look to their leaders to help clear up the ambiguity that is often associated with ROE. Leaders must take the time to think through the "sticky" situations that their soldiers will face, and give them guidance that will serve them in a

time of crisis. The unpredictability of war and operations other than war, and the stress that combat places on the thinking abilities of leaders, highlight the importance of ROE.⁵⁵

However, before the leader can deliver the ROE to his soldiers, he must first think through the many versions of guidance that each layer of command will emplace. There are potentially nine different iterations of ROE's if one starts at the CINC level, continues to the JTF level, and works down to the team leader. "The eighteen-year-old assigned to an infantry platoon, whose guidance descends through many layers of command, is more likely to violate the purpose of senior leaders' ROE, despite desperately wanting to do the right thing."⁵⁶ The leaders and soldiers who served in Somalia and Haiti faced these sort of mental challenges, and the leaders and soldiers who will serve in Bosnia-Herzegovina will face these same challenges.

V. Alternatives for Leaders

There have been other recent research attempts to identify those aspects that leaders will need to be successful in the future. The United States Army Research Institute for the Behavioral and Social Sciences published a report on "Critical Factors in the Art of Battle Command." The report extensively explores the concept of battle command through a collection of works on related subjects such as critical thinking, decision making, and problem solving. The report offers the excellent insights of Majors James C. Madigan and George E. Dodge, who devised a conceptual framework that lays out a continuum of leader competencies over the three levels of leadership. (see pg 42) At the direct level, the nine leadership competencies covered earlier in the paper make up the richest communication interaction between the leader and led. The next level is organizational, and at this level leaders are executing more abstract functions such as clarification of ambiguity, and planning and integrating. Finally, at the strategic level, the leader must possess extremely broad capabilities such as negotiation, consensus building, political and cultural skills. This paper is concerned only with the direct and organizational levels. The implications of this model is that there is "an increase in volatility, uncertainty, confusion, and ambiguity at higher levels of leadership."

While the more senior level leaders certainly must deal with more complex situations relative to the organizational and direct levels, the second half of the illustration (see page 42) depicts a better way to portray the model. This model suggests that tactical leaders in 21st century must not only possess the competencies of the direct and organizational level, but also possess the competencies that Madigan and Dodge portray as residing at the strategic level. The

ambiguity and uncertainty that exists in 21st century environments compress the three levels into one tightly wound mass. Thus, there is a blurring of the levels and all of the competencies are equally important for the leader to possess. How then does the leader establish order and make distinctions between the various levels? Unfortunately, the instantaneous nature of the media will often not allow the leader any time to order his environment. More simply, the tactical leader will often find local actions quickly affecting actions, decisions and policy at the operational and strategic levels. The leader imparts order in hostile environments by assembling the competencies that are all in a state of latency or activity depending on the situation. It is up to the 21st century leader to make an assessment of his environment, "boot-up" the appropriate competency, and take action as the situation dictates. These kinds of situations will require broad thinking. After the 1983 bomb incident in Beirut, someone drew a marine cartoon depicting a marine rifleman behind a barricade in Lebanon with the President of the United States telling him that before he fires, he should think through the complexities of the War Powers Act.⁵⁸ This illustration does not attempt to make light of a very serious event in military history, however it underscores the scope in which leaders of the future will operate. Future leaders hopefully will not have to seriously consider the stipulations of such lofty documents as the War Powers Act, but they will have much to consider. Thus, leaders and soldiers operating in this kind of environment require a broader perspective with regards to technical and tactical proficiency.

L. L. Cunningham offers another aspect of leadership that future leaders will need in future conflicts, whether they be conventional war or operations other than war. The concept offers that "a leader must possess skills allowing for the bridging of gaps between different

interest groups."⁵⁹ Organizations are made up of a number of smaller groups which collectively, solve problems and accomplish tasks. The first aspect of the skill posits that leaders must communicate with the individual and groups in their organization to accomplish tasks. This is no great revelation, and in fact, it is a confirmation of the basic communication required between the leader and the led posited in the first part of this paper. However, the second aspect of the skill suggests that "there are the relations with individuals, groups, organizations and institutions not under the leader's authority but who have a stake in the operation of the organization."⁶⁰ The Army Research Institute report offers another author's thoughts on this second skill. Strodl calls this ability to affect these secondary groups as constituency leadership. He offers that in the military, this constituency "would include other military activities, joint and allied forces, civilian interest groups and political entities."⁶¹

Recent operations in Haiti and Somalia, clearly indicate the necessity for leaders possessing the skills to lead other teams than strictly army organizations. In the Handbook for the Soldier in Operations other than War, under the topic of Negotiation and Mediation, the manual contends that "leaders may find themselves in the role of negotiator, mediator, and even arbitrator at the point of confrontation."⁶² Referring back to the leadership framework that Madigan and Dodge offer, constituency leadership would encompass such competencies as political competence, cultural competence, consensus building, joint and combined relationship understanding, and negotiation.⁶³ In keeping within their model, the authors of the model contend that these competencies reside only at the strategic level of leadership. However, giving the rationale explained earlier, reference the blurring of the different levels of leadership, this author contends that the tactical level leader needs these competencies as well.

Clearly, the 21st century leader who may find himself as one of the few forms of legitimate authority along with an assortment of foreign nationals and Non-Governmental Organizations, will need these competencies. However, what then are the keys to ensuring success? Strodl says that there are three important points. The first, is the "bond of trust based on the grounds of common interests; the second, is that the constituency leader can allow problem issues to be the focal points for group action; lastly, by relying on information gathering, intuition, sensitivity, and involvement with subordinates, joint arousal to attack problems can be achieved."⁶⁴ The task force commander who finds himself at the point of the spear, trying to make order out of an ambiguous situation, will find some help if he focuses on the three areas covered above. The bottom line to the above guidance, is that the leader must extend the concept of "teamplay" to groups and organizations outside of the military organization in order to be successful. This will be a difficult task requiring patience, intelligence, and resolve. The guiding principles in this type of operation are of the nature listed in FM 100-5's chapter on operations other than war. For example, in the operation other than war scenario, military leaders may find that they may not have the leading role in the accomplishment of the task at hand. As FM 100-5 states, other government agencies may be most prominent, and commanders may find themselves responding to a civilian boss.⁶⁵ The leader's ability to expand and contract his or her concept of the leadership required to run the organization is critical to success in operations other than war. The leader is fundamentally responsible for the soldiers that are under his command and this bond should never change, however, the leader may have to extend the bounds of his leadership based on the situation he may find himself in.

Tacit knowledge provides future leaders another opportunity to help lead subordinates directly under their charge, or other agencies and groups who fall outside their formal influence. "Tacit knowledge is knowledge that is unspoken, under emphasized, or poorly conveyed relative to its importance for practical success." ⁶⁶ Tacit knowledge is concerned with knowing how to do something; is important in achieving the group's goals; and is acquired with little help from others.⁶⁷ Leaders with the ability to exercise strong tacit knowledge skills are not overly concerned with learning all the intricacies of a discipline, but rather focus more on learning about a discipline. ⁶⁸ The tacit learner is concerned with the practical aspects of a subject matter. This is an important skill for a military leader in the 21st century because it concerns adaptability. To thrive in a complex environment, adaptation is paramount. The leader must transition and shift from situation to situation, as easily as the chameleon changes hues. Research indicates, that tacit knowledge will increase with more experience in a domain.⁶⁹ For example, the more that leaders practice operating in complex environments, the better will be their performance. Additionally, data from the United States Army Combat Training Centers validate this phenomena.

The unfortunate thing about this type of knowledge is that it is hard to measure. Having personally participated in the collection of the data for measurement of this knowledge, researchers want to know how a leader knew what he knew when he made a particular decision. The leader's answer invariably seems to be, "Because, you just know." It is a function of observing an event, and then developing a routine or methodology for problem solving. The more times that one has to see the event, or be in the situation, the data indicates that there will be a "value added" quality to his decisionmaking ability. Thus, "a commander's stock of tacit

knowledge may be more important than his stock of explicit knowledge." For example, referring back to the constituency example, building cohesion among the various agencies or joint and coalition groups may prove more important than knowing the exact details of these organizations.⁷⁰ This discussion is not to knock the value of academic knowledge, but rather to promote the value of the less structured forms of knowledge. Tacit learners understand how major muscle movements work and the associated dynamic complexity involved. They understand that there are smaller related muscles in support of the larger ones, but their focus concerns the linkages of the larger components. Moreover, they learn all this without a detailed subject knowledge of biology 101. Having discussed the additional competencies required to be a leader in the complex 21st century environment, the question remains of how does one proceed in acquiring these abilities.

VI. 21st Century Musicians

As mentioned earlier, current wisdom advocates that there are only three ways to affect the way in which leaders fundamentally grow. The familiar three pillars consisting of institutional, operational, and self-development domains comprise a solid, fundamental approach to leader development. In fact, recent initiatives in leader development concern trying to mesh the three pillars by exploiting information age technology in order to produce a more effective and efficient environment for growing leaders.⁷¹ Additionally, current thinking governing leader development orient on two principles: (1) First, the Army must properly

sequence institutional training and education, operational assignments, and self development; (2) Second, the Army must retain progressive and sequential career development models for all leaders in their respective areas.⁷² "From these two principles are derived twelve imperatives related to each of the three domains of leader development."⁷³ Under **Institutional Domain** the imperatives are 1) retain progressive and sequential education systems; 2) train leaders in the critical tasks they will need as future leaders; 3) develop America's Army; active, reserve components, and civilian; 4) keep quality instructors in the training base; 5) select the best qualified for resident courses; 6) produce qualified students and instructors; 7) have the right mix of resident and distant instruction. Under the **Operational Domain** the imperatives are 8) provide leaders with critical experiences they will need for the future; 9) provide adequate training opportunities in adequately manned and resourced units; 10) and base assignments on leader development priorities. Finally under the **Self-Development Domain** the imperatives are 11) stress the individual's responsibility for leader development and 12) identify, specify, and refine self-development requirements.⁷⁴ This long listing of imperatives for leader development is important to ensure that the broad domains have some specified orientation.

The imperatives all point to the authors of the Leader XXI Campaign Plan attempting to provide the best plan for growing leaders who will solve problems in a complex environment. The Leader XXI Campaign Plan is a good plan that nests well within the Force XXI Campaign Plan. The Leader Development Support System (LDSS), along with the Leader Development Decision Network (LDDN), are testaments that leader development issues for the 21st century are a living, dynamic process briefed to the Chief Staff of the Army once a quarter. Moreover, with the update of all the current leadership manuals by the Corps and Division Doctrine

Directorate, many smart minds are actively thinking about how to help leaders lead in the 21st century and beyond. As mentioned earlier, this paper attempts to add to the intellectual debate by suggesting ways that leaders can broaden and move beyond their existing leader capabilities. In keeping with that charter, the ensuing discussion will focus on how best to effect the individual development pillar. Thus, the question now becomes how do leaders develop and improve their leadership abilities?

To help answer this question emerging leaders need a systematic process that they can rely on to help them grow into broad adaptive thinkers. This would allow the leader to manufacture answers to problems requiring innovative solutions. The capacities that the leader require more artistry than science. Given the likely continued technical explosion forecasted for the future, this assertion might appear somewhat paradoxical. However, a closer examination of the kind of problem that future leaders face may help in defining the sort of solution required. Dr. Schneider provides some illumination on the double bind problems that military forces will have to solve. Double-bind problems have the following characteristics: (1) In trying to accomplish your mission you cannot do A; (2) You must do B; (3) In reality you cannot not do A and you cannot do B; (4) You are largely unaware of rules 1, 2, 3 because they are hidden in the problem itself; (5) You cannot discuss the existence or nonexistence of rules 1, 2, 3, because they are not self-evident. These type of problems present the military leaders with the ultimate "do loop." Dr. Schneider contends that the answer to this dilemma require that leaders think beyond the conceptual limitations of their present framework, because the solutions to the double bind problems lies hidden within us.⁷⁵ For Dr. Schneider, the bottom line is that the solution comes down to "seeing clearly." He says that "advanced military education, should

force the student to 'leap' beyond the shadow of his ignorance and preconceptions."⁷⁶

Clausewitz's view of theory is similar to Schneider's view of education. For Clausewitz, "theory should cast a steady light on all phenomena so that we can more easily recognize and eliminate the weeds that always spring from ignorance."⁷⁷ Future leaders will struggle in their own mind and with the thoughts of their peers, subordinates, and superiors with vestiges of tradition, convenience, and ignorance which will often hinder and shackle innovative solutions. However, there are other alternatives which may help one solve the double bind problems of the 21st century.

Complex problems for the 21st century leader will have an element of urgency, as well as a degree of difficulty, to them. Thus, whatever solutions that leaders derive must have a real, or near real time quality to them. Schon's concept of reflection-in-action provides an appropriate mix of rigor and sensitivity to time that make it useful to the leader to use in practice. In simple terms, reflection-in-action involves thinking about something that has just occurred or occurring and making subtle self-adjustments as the action or event unfolds. To get a better understanding of this concept it is necessary to first describe another concept. Knowing-in-action "refers to the sorts of know-how we reveal in our intelligent action. . . we reveal it by our spontaneous, skillful execution of the performance; and we are characteristically unable to make it verbally explicit."⁷⁸ Sports offers useful analogies. The father who struggles to tell his son "how" to throw and catch a baseball is just such an example. The father can not relate a bunch of figures and estimates of distance to assist the boy in catching the ball.⁷⁹ Still another example concerns the different adjustments that a basketball player makes when shooting a layup, a short jumpshot, or a shot from beyond the three point line. Once again, it is difficult to

explain the differences in "touch" required for these repertoire of shots. However, Schon contends that when we do try to describe this "knowing," that they are always constructions of something that began as a tacit response.⁸⁰ No matter whether one is catching a ball, or trying to predict which way the enemy will come into our area of operations, it is a process of continual adjustment and refinement.

There are many people in the army, not unlike in many other organizations, who become proficient at operating at this level of activity. Over time, this sequence of "activity, recognition, decision, and adjustment" become filed as routines that are subsequently called up as we need them to get us through the day.⁸¹ In fact, one's ability to act without thinking is usually the *modus operandi* for many people, causing some to get stuck into preconceived structures and methods of operating. This inhibiting phenomena is precisely what Dr. Schneider, in his article, is urging that leaders overcome. He stresses the value of qualitative education in preparation for the next fight. For the most part, knowing-in-action is sufficient for day-to-day operations, but what is the answer when something comes along which upsets one executive routine?

Schon contends that when situations occur in which "spontaneous, routinized responses" do not work, several things will occur. First, the routine response attempts to make sense of the situation. However, the individual structure is found lacking, and a surprise occurs. A surprise is an unexpected outcome, that will not fit in the knowing-in-action framework. Surprise then leads to reflection while the action occurs. In other words while a person is thinking about what he is actively doing, this thought process helps shape what he eventually does. Reflecting-in-action, allows one to question the assumptions and the

structures of existing knowing-in-action schemes. Reflection then gives rise to an on-the-spot experiment.⁸² In other words, the person attempts to try and create new ways of understanding the things he is observing.

To summarize, the author says that "in reflection-in-action, the rethinking of some part of our knowing-in-action leads to on-the-spot experiment and further thinking that affects what we do."⁸³ To get a better understanding, the author offers an example of a cellist who misses some practice sessions before a concert and thus, was not that familiar with what he had to perform. The cellist was able to sight read his way through the piece, picking up on the foundations laid down by the other musicians. The author contends that musician encountered many surprises while playing the piece, but was able to make on the spot adjustments as the whole piece emerged.⁸⁴ This is similar to how jazz musicians, when playing a song, will improvise and create new melodies based on on-the-spot experimentation. But, why all the fuss about music, baseball, and reflection?

Twenty-first century leaders must be able to reflect-in-action to be successful in a changing, complex environment. As a force projection army that will deploy with short notice in response to crises, the leaders will find themselves bringing those spontaneous routines to many different places. This is especially true of most nations of the world that do not share our western hemispheric view. American underlying assumptions embedded "rootlike" into the minds of the soldiers and leaders will taint our interaction with other peoples with a certain bias. Hopefully, the leaders and the soldiers have concentrated on training that enables them to think broadly and "outside the box." Unfortunately, given the current and projected status of funding for the military, this author's hunch is that there will be some inadequacies that translates into

some soldiers not enjoying the resources that allows them to be all they can be. The significance of this is, that some particular enemy or environment might pose a surprise in the form of a double bind problem that will force leaders to come up with some innovative solution. The reflective leader is able to take what the situation has to offer and develop some feasible course of action. He will be able to take lemons, and make lemonade. While making lemonade, the leader must be able to quickly question his own decisionmaking apparatus and make the on-the-spot experiments as the situation unfolds. In some cases the leader will miss more than a few rehearsals, he may have missed a whole season of practice, yet, the mission requires that he sight-read his way through the performance. Thus, Schon's insights are primarily important because it empowers the leaders with a quick, flexible conceptual process that will routinely help leaders develop innovative solutions.

This is important to the 21st century leader because there is a synergistic or team aspect to this phenomena. Schon says that when good jazz musicians are improvising they are listening to one another, they are listening to themselves, they can feel where the music will end up and make adjustments accordingly.⁸⁵ As one musician plays, the next musician listens, and when he ultimately plays, he is building upon the foundation laid down from the first player. Army leaders working in austere environments like Haiti will need to have the ability to build upon the work of other nations, joint forces, civilian agencies, etc., in order to be effective. Team play wins. Conflicts of the 21st century will not be one-man band presentations. United States leaders will have to learn how to play background pieces as well as "take lead" in the international arena. Thus, reflective thinking will be a powerful source of innovation for the future leader. It will give him the mental agility to solve problems within the immediacy of the

moment. Mental predispositions and faulty assessments concerning the enemy will not be catastrophic because the leader has a mental framework which allows him to recover.

Systems thinking provides another capability for leaders to effectively deal with complexity. Senge's fifth discipline explains that the key to dealing with complexity is the ability to see wholes. "Systems thinking is a discipline for seeing the 'structures' that underlie complex situations, and for discerning high from low leverage change."⁸⁶ Moreover, it involves "seeing interrelationships rather than linear cause-effect chains, and seeing processes of change rather than snapshots."⁸⁷ The technological advances of the next century will speed up the response time between cause and effect. This phenomena might cause some leaders to react hastily to events on the battlefield. However, with an understanding of how events interrelate, leaders are less likely to make snap decisions that could have delayed disastrous results.

Senge's concept of dynamic and detailed complexity is especially helpful to leaders, because it helps order the battlefield for them. Detail complexity concerns an element or situation that has a lot of variables. As Senge contends, "mixing many ingredients in a stew involves detail complexity, as does following a complex set of instructions to assemble a machine."⁸⁸ There simply are a lot of moving parts and intricacies to the problem. Dynamic complexity on the other hand, deals "in situations where cause and effect are subtle, and where the effects over time of interventions are not obvious."⁸⁹ Additionally, he says "when obvious interventions produce nonobvious consequences, there is dynamic complexity."⁹⁰ The author gives the example of a gyroscope as an example of a dynamically complex machine, because one can never predict how the instrument will respond when you apply force to it. Twenty-first century leaders will find themselves overloaded with detailed complexity. There will be a

multitude of variables that they will have to filter through and try to organize into some coherent whole. Dynamic complexity gives one the ability to see the major moving parts of a problem and how they interrelate. When the computer becomes overloaded with information, the ability to separate major parts and in turn, see where the best place exist to apply leverage is helpful. The ability to get the most out of limited resources, such as time, will be critical to future warriors.

Besides gaining insights as to where the best place to apply leverage in situations, an understanding of dynamic complexity makes leaders more responsible for their current actions. One of the reasons the military is so often looked to as an option in domestic and foreign crises is because of our ability to solve problems quickly. However, in the haste to provide "fixes" so that political objectives are obtained, the military could mistakenly make decisions which would eventually have second and third order delayed effects. An appreciation of dynamic complexity provides the leader with an aspect of clairvoyance that will enable him to see through the entire problem, and its consequences, over time. The time element could be as short as a few minutes to several years. The important thing is that because the leader has the ability to project out over time, this helps influence his immediate decisions.

Senge's concept of reinforcing and balancing feedback provides another source of knowledge for leaders with respect to leading an organization. Senge says that in reinforcing process, "a small change builds on itself; whatever movement occurs is amplified, producing more movement in the same direction."⁹¹ Moreover, reinforcing processes can increase in a upward spiral or increase in a downward spiral. The power of the force, not the direction, is the key element with respect to reinforcing processes. Balancing feedback "operates whenever there

is a goal-oriented behavior."⁹² Balancing feedback, provide limits to growth which can slow, divert or reverse it.⁹³ Thus, reinforcing forces will not operate totally unchecked, because balancing force will counteract the dynamic aspect of the reinforcing processes. An understanding of these two processes will allow leaders to see that underlying most systems are these two major forces and what the impact they have on operations.

Leaders who understand that these dynamics will underlie most of their operations will enjoy a clearness of thought which will manifest itself in the smooth running of their organization. When leaders understand the connections and linkages of their organization with respect to the task at hand they are able to function expertly. Helmut von Moltke, the Prussian General Chief of Staff, understood the reinforcing and balancing aspects to the Prussian Army. The expert planning, guidance and decentralized control imposed over the subordinate units by the General Staff, allowed the leaders to conduct one successful campaign after another in the late 1800's. However, Moltke also understood that there was a limit to how much he could plan for in a campaign. He said "that planning should go only as far as the first encounter with the enemy."⁹⁴ He knew that there was a balancing dynamic that would limit his plans no matter how expertly he planned. Twenty-first century leaders can benefit greatly from an ability to see through to the essence of their task. Because inputs from information technologies will try to cloud a leader's ability to make decisions, the more informed the leader's mind is before the operation, the better will be his thinking on the battlefield.

VII. Conclusion

As American forces count down the last few days before participating in NATO's large peace enforcement mission in Bosnia, many last minute questions, issues, and concerns will undoubtedly cross the minds of leaders, planners, and commanders at all levels. Issues such as how many personnel, logistics, or systems to deploy are questions that will constantly change and fluctuate as the operation begins to unfold. The young men and women who embark on a mission which has the potential to last for at least one year, will often find no easy answers to their questions. One can only imagine the problems that these soldiers will face. Ambiguity malingers at every check point or road block that the United States forces set up to control the flow of traffic into their area. Complexity will be abundant, laying bound in the tangled layers of command and control structures, designed ironically to simplify things. Uncertainty, resting dormant in the minds of all soldiers deploying to the theater of operations, become active when they are suddenly thrust into life-threatening situations. Solutions to problems in this region of the world, will require innovative thinkers who can visualize beyond the limits of their respective perimeters. This near term operation, with all of its complications, foreshadows the nature of warfare for US forces in the 21st century. But, it is just the beginning.

The 21st century will bring remarkable advancements in informational technologies to our armed forces, and the international environment will continue to be a dangerous setting. Technology is helping to revolutionize how soldiers think about warfighting. It allows commanders to gain perspectives, receive information about friendly and enemy units faster, and process raw data faster than we ever have in our nation's past. Some would contend that

systems can replace a lot of the functions that humans now perform on the battlefield.

Experienced soldiers know that automation should be used only to replace certain repetitive functions and should never take the place of human reason and emotion. The human dimension is needed today more than ever. No longer balanced by a sense of global symmetry, the world has and will continue to be a place where regional and local unrest will boil over, forcing more stable states such as the United States into action. Only men and women of character can respond in a selfless, collected method. United States Army current doctrine on leadership addresses the skills, competencies, and abilities that our leaders must possess to lead our armed forces. These collections have been a useful framework for many years, but the continual steady rate of change impacting on our forces offer some additional considerations for future military operations.

Tactical leaders in the 21st century must possess a sense of cultural sensitivity and awareness more than they ever have in the past. Because the United States Army is now a power projection force, there is the potential for United States forces to lose their ability to relate and understand other nations and their peoples. This is significant because United States forces will not always deploy to defeat or destroy another force. The Army's missions of the future appear to be very nonstandard and of the OOTW flavor. In the event that the United States does have to conduct combat operations, the United States may find itself increasingly involved in post hostilities operations. Operations JUST CAUSE and DESERT STORM, both had elements of this dynamic, where military forces found themselves doing much more than just conducting combat operations. Moreover, as a leader deployed in a nation that is relatively austere, it will be helpful to have an understanding of a nation's customs, traditions, and values. Thus, in light

of the fact that most of our Armed forces are now based in Conus, the opportunity to develop this cultural knowledge is best addressed by military schooling or individual self-development which should continue to expose military leaders to the different ideologies and cultures of many nations.

Once the 21st century leader is on the ground conducting his operation, he will need strong thinking and intuitive skills. The leader's developed cognitive ability will enable him to be mentally agile and allow him to see the enemy in time, space and depth. In a OOTW environment he will know that his biggest concern may not involve worrying about fuel for actual heavy combat operations, but worrying about fuel for the trucks which will carry relief supplies to the needy. Additionally, solutions to double-bind problems do not just fall into the laps of the undisciplined and unexercised mind. They come into fruition because leaders are spending their own time, as well as time at the schools, working the issues. Intuitive skills enable the leader to break down what is seemingly complex, into bite size little pieces. Twenty-first century soldiers will lead in flatter, leaner organizations that will not only allow but demand that leaders make the right decision on the spot.

The 21st century leader making his decision will employ leader competencies that some would contend might reside at levels beyond the tactical level of decisionmaking. However, given the media's ability to catapult the tactical leader's decision to a world view, and the joint and combined flavor to all future operations, the young company commander or battalion S3, might find his actions directly affecting decisions at higher echelons. Thus, the required skills and competencies for the 21st century leader becomes more extensive than skills involved in the direct level of leadership. The more conventional practice of separating levels of leader skills

becomes blurred into one giant level. The leader with the benefit of his intellect and training, applies the appropriate competency at the right place and time with the understanding that his actions could potentially have second and third order effects on the decisionmaking hierarchy.

Fundamentally, the 21st century leader must be a problem solver, and his ability to recognize innovative solutions as well as communicate his intent or problem design to different subordinates, groups and agencies is important. The future leader will rely heavily on his tacit skills to solve problems. Theory and doctrine will be good points of departure for him, but will not necessarily empower him to make better decisions while on the ground. Leaders apply certain skills or knowledge to a situation, because they know it is the right thing to do. The leader's ability to interact and deal with all of the various constituencies to include the service, joint and combined organizations will be crucial also, because leaders will rarely wage war without being part of a larger team. Unfortunately, these various groups will have the potential to fracture without leaders who have the abilities to span the divides that separate them.

Twenty-first century leaders must be reflective leaders who are able to improve and adapt to situations in a timely manner. The reflective leader is able to reflect on his decision making process as it unfolds and make immediate adjustments. The leader will carry a lot of learned knowledge to the battlefield. However, the leader who, when faced with a surprise, is able to tear down existing schemes and reassemble new structures and linkages quicker than the enemy, will be most successful in conducting military operations. This ability to tear down and reassemble repeats itself over and over in the reflective leader's mind and is the key to survival when one operates in complex environments. Organizations through the aggregate collection of all its reflective minds exhibit similar abilities to adapt to their environments.

Finally, 21st century leaders must also be systems thinkers. Systems thinkers can swim in the ambiguous sea of the future battlefield. An appreciation for the whole will allow them to better separate the complexity into dynamic and detailed parts. Future leaders can only address so much of the details that technology will extract from the future battlefields. A leader's ability to see the "major muscle", or dynamic aspects of his environment, is also important. An appreciation for both aspects of complexity are important, but what is more important is that the leader develops the techniques for first collecting and then filtering the two aspects. An understanding of reinforcing and balancing processes will help the leader realize that all operations have certain dynamics that are at work under the leader's casual view. This insight will in turn enable him to anticipate and plan for future operations. The leader will know that while a particular operation seems to be going along extremely well, or experiencing some problems, there are probably forces operating that will eventually balance or stabilize the system. There is a sense of knowing with the "systems view" that gives the future leader an inner peace and stability while conducting military operations in complex environments. This stability will allow the United States 21st century military leader to continue to win our nation's wars as they have for over two centuries. A military that continues to draw its leaders from all factions of society, challenges them to grow, think and learn will allow our military forces to always enjoy an edge over our adversaries.

LEADER COMPETENCIES

CURRENT

STRATEGIC LEVEL

- ☒ Frame of Reference Construction
- ☒ Problem Management
- ☒ Planning/ Invisioning
- ☒ Rational Risk Taking
- ☒ Opportunity Recognition
- ☒ Systems Understanding
- ☒ Joint and Combined Relationship
- ☒ Understanding
- ☒ Political Competence
- ☒ Cultural
- ☒ Consensus Building
- ☒ Negotiation
- ☒ Communication

ORGANIZATIONAL LEVEL

- ☒ Communications
- ☒ Vision
- ☒ Planning and Integrating
- ☒ Clarification of Ambiguity
- ☒ Assessment
- ☒ Development
- ☒ Evaluation

DIRECT LEVEL

- ☒ Communications
- ☒ Ethics
- ☒ Supervision
- ☒ Teaching/ Counseling
- ☒ Technical/ Tactical Proficiency
- ☒ Decision Making
- ☒ Planning
- ☒ Team building
- ☒ Use of Available Systems

21st CENTURY

- ☒ Frame of Reference Construction
- ☒ Problem Management
- ☒ Planning/ Invisioning
- ☒ Rational Risk Taking
- ☒ Opportunity Recognition
- ☒ Systems Understanding
- ☒ Joint and Combined Relationship
- ☒ Understanding
- ☒ Political Competence
- ☒ Cultural
- ☒ Consensus Building
- ☒ Negotiation
- ☒ Communication
- ☒ Vision
- ☒ Planning and Integrating
- ☒ Clarification of Ambiguity
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- ☒ Teaching/ Counseling
- ☒ Technical/ Tactical Proficiency
- ☒ Decision Making
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- ☒ Use of Available Systems

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1. SUBMITTED BY: WILLIAMS, DARRYL A., MAJ.

DATE: August 25, 1995

2. SEMINAR: 3 MONOGRAPH DIRECTOR: Dr. SCHNEIDER

3. WORKING TITLE: "NO PARADIGM SHIFT HERE!": IMPLICATIONS FOR LEADERSHIP IN THE 21ST CENTURY

4. RESEARCH QUESTION: What are the leadership implications at the tactical level for the US Army in the 21st century?

- a. What characteristics must a 21st century leader possess?
- b. Does history offer any helpful insights for the leader operating in a future that is filled with uncertainty?
- c. What do relevant leadership theories provide in the way of help? Systems theory?
- d. Does current US Army doctrine provide sufficient guidance for our leaders?

5. PROBLEM BACKGROUND AND SIGNIFICANCE: The monograph will focus on the subject of leadership at the Corps and Division level. TRADOC PAM 525-5 states that "future leaders will be fundamentally competent and have the necessary intuitive sense of operational units and soldiers." Additionally, it contends that "future leaders will have a broader understanding of war and the art of command." Recent literature on Information Age Warfare includes the premise that the tempo and abundance of information could overwhelm future leaders. This paper will explore how the US ARMY might proceed in developing the necessary competencies in its combat leaders, so that they can process information and make decisions in a complex environment.

While our Army's leaders can not predict with a great amount of certainty what future battles will look like, most seem to agree that it will be a battlefield filled with ambiguity and uncertainty. General Sullivan in his article "Land Warfare in the 21st Century" posits five trends that will characterize future battles. These five trends are lethality and dispersion, volume and precision of fire, integrative technology, mass and effects, and invisibility and detectability. General Sullivan concedes that each one of these trends is significant however, "the synergism they create. . . reinforces the changes occurring in the international and domestic context where wars fought and military force is used." The net result of all these dynamics is change in a revolutionary manner.

Although there may be differences in 21st century warfare, there are consistencies which will continue to influence future battles. General Sullivan identifies these three constants as the root causes of war, the nature of war, and the

essence of fighting power. Of these, the nature of war has particular significance because it unifies all forms of conflict ranging from conventional warfare to operations other than war. As he further states, "the nature of war, even in operations other than war- peacekeeping, humanitarian assistance, or enforcement of sanctions-remain a contest of wills where one group attempts to force its will on others." If these assertions are correct, the implications for the 21st century leader are clearer despite the existing ambiguity and uncertainty. The 21st century leader will have to devise new ways to assert his will on the enemy, perhaps requiring him to think "outside of the box," of conventional reasoning and assumptions.

The operations- other- than-war (OOTW) environment will require that leaders possess a great deal of flexibility to contend with the complexity that will manifest itself in all aspects of warfighting. The OOTW scenarios, evidenced by missions such as Somalia and Haiti, appear to be the most likely place where Force XXI units will fight. General Sullivan posits that the "power -projection Army requires the very best leader development program in the world, one that will create leaders who are comfortable with change and uncertainty." A theme that is emerging in recent literature on future battle is the concept of versatility. The 21st century leader and organization will have to be able to recognize, adapt or change fundamentally to the stimuli in the environment. Like an organism that senses some temperature shift and automatically makes an effortless adjustment, leaders in the 21st century must also make such transparent shifts.

6. RESEARCH METHODOLOGY: This monograph will be a "forward looking" piece, and thus, will require that I collect my data from current and past sources and then project out hypotheses about the future. However, this seemingly "crystal ball approach" does not imply that my process will be lacking in academic rigor. I will use multiple perspectives in attacking the central research question. The plan currently calls for primary resources gathered from recent operations such as Somalia, Haiti, etc., utilizing the Automated Historical Archives System (AHAS).

Besides the insights that relatively recent history adds to the monograph, I will also use past history to gain evidence. Primary and secondary sources will be sought that focus on those periods in history when our Nation and its Army were undergoing great changes.

The monograph will also gain a portion of its support from organizations and people who are actively trying to figure out answers to the same sort of questions that this paper addresses. Currently, my plan is to conduct interviews with General Holder and General Ohle, as well as Colonel Dubik who has recent experience operating in Haiti. Also, I will query many organizations such as TRADOC,

BCTP, CAL, etc., to gain their perspectives on leadership in future battles. Additionally, the paper will draw support from current leadership and organizational theory in order to illustrate the human dynamics which will factor in Force XXI.

Lastly, there are quite a few monographs, journal articles, etc., which address Army operations and leadership/ command and control issues in 21st Century warfare. I plan to use the relevant papers and build upon the existing body of knowledge. Doctrinal criteria addressing Battle Command and leadership will derive from such manuals as FM 100-5 and ST 101-5.

7. MILESTONES:

Draft prospectus to Monograph Director: August 24, 1995

Finalize prospectus to Director, SAMS: September 8, 1995

Monograph Director Update: September 18, 1995

Monograph Director Update: October 2, 1995

Monograph Director Update: October 16, 1995

Initial Draft to Monograph Director: October 23, 1995

Monograph Director Update: October 30, 1995

Final Draft to Monograph Director: November 6, 1995

Monograph to Director, SAMS: November 20, 1995

8. MONOGRAPH STRUCTURE: The monograph will consist of five major sections.

a. Introduction: The introduction will be the opening part to the paper, and will set the stage for the rest of the paper. In the introduction, I will make the reader aware of the purpose of the paper, as well as introduce the major parts of the paper. These opening remarks will be comprised of approximately 6 well-developed paragraphs.

b. Body: The main body of the paper will begin with an assessment of future battle and the skills that the 21st century leader will need to "think outside the box." The paper will start with a review of what current doctrine says with respect to battle command and leadership. The paper will also look to the behavioral sciences to help in articulating what characteristics are vital to combat leadership at the tactical level. Next, the paper will take a look at a series of historical case studies, to see how past leaders dealt with uncertainty in periods of change. The paper will also address the United States' OOTW experiences in Haiti and Somalia as recent examples of the kind of complexity that future leaders will face. This part of the paper will utilize approximately 20-25 pages of the monograph.

c. Analysis/Discussion:

This part of the paper will examine the details of the information presented and thus, move toward some level of satisfaction in developing the conclusions offered in the next section. This part of the paper will be approximately 10 pages in length.

d. Conclusions: This part of the paper will be approximately 5 pages in length and attempt to do a synthesis of my research and offer recommendations to the profession of arms.

e. Summary: This section will return the reader's focus to the main portions of the paper.

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